EASA Safety Information Bulletin

SIB No.: **2009-09**
Issued: **27 April 2009**

Subject: **In-Flight Engine Failures – Proper Identification and Procedures**

Ref. Publications: Federal Aviation Administration (FAA) Safety Alert for Operators (SAFO) 09008, dated 06 April 2009.

Description: The FAA published the above-referenced advisory document (which is attached as page 2 of this bulletin) to remind aircraft owners and operators of the importance of accurately verifying the indications of an engine failure, and to appropriately respond with proper procedures while planning for the remainder of the flight.

After reviewing the information, EASA supports the recommended actions contained in FAA SAFO 09008. This SIB is published to ensure that all owners and operators of aircraft, registered in European Union Member States or associated countries, are made aware of these important reminders.

Applicability: All aeroplanes and helicopters, especially (but not exclusively) multi-engine aircraft.

Contact: For further information contact the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.

U.S. Department
of Transportation

**Federal Aviation
Administration**

SAFO

Safety Alert for Operators

SAFO 09008
DATE: 04/06/09

Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: Proper Identification and Procedures During In-Flight Engine Failures

Purpose: This SAFO supersedes Flight Standards Air Transportation (FSAT) Bulletin 96-17, which addressed National Transportation Safety Board (NTSB) safety recommendation A-95-098. It reminds operators the importance of accurately verifying the indications of a powerplant failure, and to appropriately respond with proper procedures while planning for the remainder of the flight.

Background: Incidents where the flightcrews improperly identified and reacted to cockpit light indications stressed the need for this SAFO. In one example, one event occurred during an approach when an engine ignition light came on. Without further verification, the flightcrew assumed that the engine had failed and continued the approach. During the attempted single-engine missed approach, the flightcrew lost aircraft control and crashed. Communications between the pilots during this accident indicated lack of situational awareness as well as misidentification of the problem. This accident may have been avoided if the flightcrew correctly analyzed the situation and took proper corrective action. Once they incorrectly assumed the engine had failed, the crew then complicated the situation by failing to accomplish the correct engine shutdown procedures and plan for a single-engine approach. The investigation revealed that during training the only time the crew experienced an illuminated ignition light was in conjunction with an engine failure. During training, flightcrews were not exposed to circumstances that may cause the ignition light to illuminate other than an engine failure. This may have conditioned the crew to regard the light only as an engine failure event.

In a separate event, the crew was confronted with an illuminated start valve light, followed by fire indication lights shortly after takeoff. The crew only completed the first two steps of the emergency procedure checklist (Autothrottle: Off and Throttle:Idle), before stopping to brief the flight attendants. Failure to complete the engine fire shutdown procedure in a timely manner led to additional problems during the subsequent approach and landing. Although a captain may do whatever he or she judges most important to mitigate an emergency situation, given the information available to the flightcrew at the time, it is important to stress that interrupting an emergency checklist should be strongly discouraged as a matter of safety policy unless a greater emergency exists.

Recommended Action: Directors of safety, directors of operations, and individuals responsible for training programs are encouraged to review their training curriculums for emphasis of the following points:

- Initial and recurrent training programs should provide a broad range of engine failure scenarios, including failures that may be misinterpreted as an engine failure.
- Once the flightcrew verifies an engine failure, they should take action to accomplish the correct shutdown checklist and properly plan for an engine-out approach and possible go-around.
- Emphasize the importance of the emergency/abnormal checklist, and that they should not be interrupted for routine events until the checklist has been completed. This would include completing the immediate actions for an engine fire or severe damage.

Contact: For more information regarding the content of this SAFO, contact Gloria LaRoche at the Air Carrier Training Branch, AFS-210 at 202-493-5427.